ABSTRACT OF THE DISCLOSURE

A method for synchronizing the timers of the network nodes in a network to the precise microsecond, where at least one of the network nodes undertakes the function of the network master in a subnetwork and the time on the master is used as a reference time for the subnetwork which is to be synchronized. The master first causes no unauthorised communication to take place in the subnetwork during the subsequent method steps. The master sends a delay-time measurement message to every network node in the subnetwork in order to ascertain the signal delay time, the master then sends a time setting message to every network node, and finally the time on the network nodes is aligned with the reference time for the subnetwork, preferably on a step-by-step basis.